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be secured. The rate to be used in such computations has been one of the moot points in this whole interest controversy, and there are undoubtedly those who would maintain that Mr. Szepesi's four per cent is not the rate to be used.

After completing the discussion of the cost elements the author takes up the methods of control. The control accounts of a modern cost organization, including the interlocking of the general financial accounts and the manufacturing and operating accounts, are well discussed. Although very satisfactory results are often obtained where no such interlock exists, too many business men fail to realize that the only certain proof of the accuracy of a cost system is the complete interlocking of the financial and production accounts. The various control records are next discussed. These provide for the purchasing, storing, and requisitioning of materials and supplies, for the various processes through which work in progress passes, and include the various production records. Ample illustrations are given for each.

The last third of the book deals with the records to be used for registering the progress of production. Specific illustrations and numerous forms are given. Final chapters discuss cost control without red tape and illustrate the cost procedure. The illustrations throughout the book relate specifically to mill operation. Numerous tables, directions for preparing reports and distributing expenses are included, together with a large amount of other useful material.

The book as a whole will probably prove of interest only to the mill operator and to the professional cost man. The opening chapters, however, dealing with the general elements of cost, will be of interest to any reader of accounting or business literature, for the method of presentation enables the reader to visualize just why and how each of the several elements of cost comes to exist, and why their solution is necessary to business success. Mr. Szepesi has written a volume which will stimulate real productive thinking on this important subject—the control of costs in textile mills.

## J. Hugh Jackson.

Economics of Bridge Work: a Sequel to "Bridge Engineering." By J. A. L. Waddell. (New York: John Wiley & Sons, Inc. 1921.)

The present work, by a trained engineer of large experience and reputation, is of significance to students of economics. It is one of many indications of the spread of the ideal of economic training in technical education. The graduates of our technical colleges have long been objects of criticism because in the practice of their profession they have been guided almost solely, or too largely, by the ideal of technical perfection regardless of economic considerations. Men of affairs and the general public have been able to point to buildings

planned with reference to medieval conditions, or built of materials not available in the neighborhood; and to trolleys made technically perfect, but at a cost quite unjustified by traffic.

The author of this book has long been a vigorous critic of the overtechnical tendencies in engineering education. As the chairman of a committee of the Society for the Promotion of Engineering Education, he brought in a report about 1916 urging strongly the increasing study of economics in engineering schools. This report went beyond the views of the more technically inclined majority of the Society and a new committee that was appointed returned to their blueprints, recommending that economic instruction requiring at least two or three years should be compressed into a single term.

Dr. Waddell then turned with his characteristic energy (seemingly undiminished by his 67 years) to the task of demonstrating what might be done toward recognizing and emphasizing the economic factors in every corner of his own special field of bridge building. The value of the resulting work on its engineering side can be judged eventually only by practical bridge engineers. It would seem to the layman to be full of valuable suggestions in that direction; but the work in numberless points has interest to the student of general economic principles. It is true that the author's conception of economics is pretty narrowly confined to the specific problem of building particular bridges at definite points at the lowest cost in money. He defines economics as "the science of obtaining a desired result with the ultimate minimum expenditure of effort, money, or material." He gives but slight attention to the question of what is "desired," or why it is desired, as shown by such things as the tax-paying power of the community, its population and resources, or the traffic to be taken care of. How much is still left to the engineering student to prepare himself really to solve the economics of bridge building may be partly inferred from the almost entire absence of any discussion, in any general way, of interest rates, or price levels, or the business cycle, or wage rates and their variations, both in time and geographically. The apparent exceptions are most meagre, referring to very specific situations. For example, the "effect on economics from variations in market prices of labor and materials" (title of chapter 4) is dismissed with little more than the statement: "There is a tendency for all prices to rise and fall more or less uniformly. If they were to do so exactly, the effect on the economics will be absolutely nil." Entirely absent is the thought here or elsewhere that the variation of the price levels and of interest rates make the building of the whole bridge more or less economic at a certain time, especially when it is paid for by incurring a debt. The author's thought here and throughout is almost entirely, so to speak, regarding

the internal economics of the problem, the relative economy, for example, of cement or iron at their prices of the moment.

This work is a pioneer effort to deal with economics in a technical art. One can recall only the notable *Economic Theory of the Location of Railways*, by Wellington, and a few minor essays in similar fields. Such an enterprise is most laudable, and cannot fail to have valuable fruits, not only because of its own merits but because of its influence and example. Not the least of its services may be to reveal to the engineers the narrowness of their conception of economic problems and of economic study, and the need of much broader and deeper training in the relations of the engineer to the economic conditions and needs of the community.

FRANK A. FETTER.

## NEW BOOKS

- Arnett, T. College and university finance. (New York: General Education Board. 1922. Pp. xi, 212.)
- Aspley, J. C. Field tactics for salesmen; a review of actual plans and methods successfully used by salesmen in all lines of business to organize a territory, handle balky buyers, meet common objections and conserve time. (Chicago: Dartnell Corporation. 1922.)
- Basset, W. R. and Heywood, J. Production engineering and cost keeping for machine shops. (New York: McGraw-Hill. 1922. Pp. 311. \$3.50.)
- Belding, A. G. Business correspondence and procedure for students in commercial and general secondary schools. (New York: Ronald. 1922. Pp. xiv, 383.)
- Borson, R. The new accounting; bookkeeping without books of original entry by the use of a natural system of double entry bookkeeping. (New York: Dodd, Mead. 1922. Pp. x, 127.)
- BOYLE, J. E. Cost of marketing grain: a history of certain carloads of grain from the farmer to the terminal buyer. (Ithaca, N. Y.: Author, Cornell Univ.)
- Bochwald, M. G. Property accounting for national guard organizations. (Washington: U. S. Infantry Assoc. 1921. Pp. 63.)
- Bull, A. E. The business man's guide to advertising. (New York: Pitman. 1922. 75c.)
- Chambonnaud, L. La technique des affaires (méthodes françaises et étrangères. IX, Les affaires et leur lancement. (Paris: Dunod. 1922. Pp. 395.)
- CLARK, W. The Gantt chart; a working tool of management. (New York: Ronald. 1922. Pp. xii, 157. \$2.50.)
- Collier, G. A. Business methods of marketing hay. U. S. Department of Agriculture, Farmer's bull. 1265. (Washington: Supt. Docs. 1922. Pp. 25.)
- Dewing, A. S. Corporation finance. (New York: Ronald. 1922. Pp. 457. \$2.75.)